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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,505	03/31/2001	Calvin Selig	10012354-1	6534

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HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
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EXAMINER	
QUILLEN, ALLEN E	
ART UNIT	PAPER NUMBER
2676	8

DATE MAILED: 11/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/823,505

Applicant(s)

SELIG ET AL.

Examiner

Allen E. Quillen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_. 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. Claims 1-43 are pending. Applicant's arguments filed September 22, 2003 have been fully considered but they are not persuasive.

***Drawings & Specification***

2. New corrected drawings and application numbers are now received.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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4. Claims 1-43 are rejected under 35 U.S.C. 102(e) as being anticipated by Murphy, U.S. Patent 6,348,919.

5. Regarding claim 1, representative of claims 12, 17, 27, 33 and 38, Murphy discloses computer program causing, and a method of eliminating stale information from a computer graphics buffer (Column 59, lines 35-50; Column 27, lines 44-60), comprising: using a fast clear mode (Column 25, line 60 through Column 26, line 5), rendering in a region of interest within the buffer (Column 25, line 60 through Column 26, line 5); determining, responsive to a state of the computer graphics system, that the fast clear mode should be discontinued (Column 26, lines 33-47); and performing a block transfer operation on pixel locations of the buffer (*bitblts*, Column 28, line 66 through Column 29, line 3); wherein a source region and a destination region for the block transfer operation are the same (Column 26, line 6 through Column 27, line 20); and wherein for each pixel location, the block transfer operation comprises: reading a clear count value associated with a pixel location in the buffer (Column 5, line 46 through Column 6, line 9; Column 25, lines 60-65); comparing the clear count value with a current clear count (Column 26, lines 10-33); and if the clear count value does not equal the current clear count, writing a predetermined value to the pixel location in the buffer (Column 26, line 23-25).

6. Regarding claim 2, representative of claims 14, 20, 35, Murphy discloses a method of claim 1, wherein: the clear count value is read from the pixel location in the buffer (Column 5, line 46 through Column 6, line 9).

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7. Regarding claims 3, representative of claims 4 and 21, Murphy discloses a method of claims 1, 17, wherein: the predetermined value is a color value (background color, Column 44, lines 9-10); and a z value (Column 5, line 46 through Column 6, line 9).

8. Regarding claim 5, representative of claims 15, 22, 36, Murphy discloses a method of claim 1, wherein: the predetermined value and the current clear count are stored in storage structures of a fast clear system (*recorded in region registers*, Column 25, line 60 through Column 26, line 5).

9. Regarding claim 6, representative of claims 18, 28, 39, Murphy discloses a method of claims 1, 17, 27 and 38, wherein: the steps are performed for each of the pixels defining a region of interest in the buffer, and wherein the region of interest is a window (*MiniRegion, window*; Column 25, line 60 through Column 26, line 19).

10. Regarding claim 7, representative of claim 29, Murphy discloses a method of claims 6, 27 and 28, wherein: the predetermined (color) value is the same for all of the pixels defining the region of interest (Column 25, line 60 through Column 26, line 19; Column 29, lines 4-19).

11. Regarding claim 8, representative of claims 23, 30 and 41, Murphy discloses a method of claims 6, 17, 27, 28 and 38, wherein: the reading and writing steps are performed using a block transfer operation wherein a source region and a destination region (of the block transfer

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operation) both correspond to the region of interest (*bitblts*, Column 28, line 66 through Column 29, line 3; Column 26, line 6 through Column 27, line 20).

12. Regarding claim 9, representative of claims 24, 31, 34 and 42, Murphy discloses a method of claims 8, 23, 30, 33 and 41, wherein: all of the pixels in the region of interest are read and written during the block transfer operation; and for a given pixel, if the clear count value equals the current clear count, a stored value read from the pixel location is written back to the pixel location (Column 25, line 60 through Column 26, line 5; Column 28; line 66 through Column 29, line 3; Column 39, line 19-29).

13. Regarding claim 10, representative of claims 13 and 25, Murphy discloses a method of claims 1, 12 and 17, further comprising: reading a stored value from the pixel location; and if the clear count value equals the current clear count, writing the stored value back to the pixel location (Column 26, line 10-25; Column 40, lines 40-52).

14. Regarding claim 11, representative of claims 16, 26, 32, 37 and 43, Murphy discloses a method of claims 1, 12, 17, 27, 33 and 38 wherein: the writing step comprises replacing the clear count value with the current clear count (*FrameCount, updates to the reference value*, Column 25, line 60 through Column 26, line 19).

15. Regarding claim 19, representative of claim 40, Murphy discloses a method of claims 17 and 38, further comprising: determining, responsive to a state of the computer graphics system,

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that the fast clear mode may be resumed; and resuming operation in the fast clear mode (Column 25, line 60 through Column 26, line 47).

***Response to Arguments***

16. Applicant asserts, Page 3, 4<sup>th</sup> paragraph, lines 9-12, “Murphy does *not* mention performing the following steps during his clear operation: (1) reading a clear count, (2) comparing it with a current clear count, and (3) writing a predetermined value to the pixel location if the clear count does not equal the current clear count. Thus, Murphy does not anticipate Applicant’s claims 1 or 27.”, “does not teach or disclose writing a predetermined value back to the pixel location if the pixel clear count is found not to match the current clear count,” and “Moreover, no mention is made in the cited excerpt or reading, comparing, conditionally writing during the block transfer. ( Page 4, 1<sup>st</sup> paragraph, lines 1-3; 2d paragraph, lines 1-3)”.

The Examiner notes, however, Murphy discloses equivalent features: *fast clear, set or cleared, for every render operation, cleared to a background color, reference frame count, found to be the same, every time the application issues a clear command the reference counter is incremented (and allowed to roll over if it exceeds its maximum value) and the nth region is cleared only*, (Column 25, line 60 through Column 26, line 48; Column 44, lines 1-20).

Examiner notes that these operations occur for each render operation and the background color is a predetermined value.

17. Regarding claims 17 and 38, Applicant argues, “Thus, Murphy does not teach discontinuing fast clear mode in response to the situation [when the stale-data-elimination should

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be performed] but merely teaches performing an ad hoc per pixel write for all values in the second plane (Page 5, paragraph 1, lines 11-13).”

The Examiner replies, however, in the claims, Murphy discloses determining, responsive to a state of the computer graphics system, that the fast clear mode should be discontinued (Column 25, line 60 through Column 26, line 48).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen E. Quillen whose telephone number is (703) 605-4584. The examiner can normally be reached on Tuesday – Friday, 8:30am – noon and 1:00 - 4:00pm.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew C. Bella, can be reached on (703) 308-6829.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**Or FAX'd to:**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Sixth Floor (Receptionist), Arlington, Virginia

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number (703) 305-9600 or (703) 305-3800.

Allen E. Quillen  
Patent Examiner  
Art Unit 2676

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November 20, 2003



MATTHEW C. BELLA  
SUPERVISORY PATENT EXAMINER  
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